



IN REPLYING, ADDRESS THE

**FEDERAL SECURITY AGENCY**  
PUBLIC HEALTH SERVICE  
DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE

Communicable Disease Center  
Enteric Bacteriology Laboratories  
P. O. Box 185  
Chamblee, Georgia

April 16, 1953

Dr. Joshua Lederberg  
Department of Genetics  
University of Wisconsin  
Madison 6, Wisconsin

Dear Dr. Lederberg:

Enclosed is the report on the cultures received from you on March 13.

Some comments are needed. Note that SW960 B, SW988, and SW891 B probably are induced phases of 1,2. Some reaction has occurred with 1,10 serum but I am not sure that they are actually 1,10 phases. However, from their reactions I believe it is safe to assume that they are changed 1,2 antigens. Unless you feel that it is desirable we will not pursue their study further.

As you surmised, cultures 2821-52 and 1553-52 probably are identical. One of these came from Commander L. A. Barnes at Bethesda. The other was received from Kauffmann. The Barnes culture came from Floyd in Cairo. Kauffmann's culture probably came from the same source. It was said to have been isolated from fresh chicken eggs. That is why Kauffmann thought it was S. gallinarum. I told him of your results with these cultures but he has not remarked upon them.

It does seem that you have transferred the suppressed a phase of S. abortus equi to Kauffmann's culture 248. (SW666). This result does not coincide with the speculation in my last letter that a phases obtained from S. abortus equi might react as phase 2, just as 1,2 phases from S. paratyphi B var. java act as phases 1 phases.

Your SW977 does not agglutinate with any of our serums although it is quite motile. I will prepare a serum for this phase although I do not know exactly what we will do with it after it is prepared. I will send you some if you wish it. SW987 has caused some trouble. (At one time Miss McWhorter thought she had some agglutination with d serum but upon repeated passage in semisolid could not confirm it.) We must study this culture further before making a final report.

Your SW981 is very interesting. I was glad to know that z<sup>33</sup> reacted as a phase 1 antigen. I think it is simply a changed b. This culture was reversed in phase from single colonies.

Dr. Joshua Lederberg

April 16, 1953

I transferred a number of forms from S. abortus equi today. I am in some doubt as to the identity of certain of the phases and must look at them before I send them to you. I am sure that we will be able to recover some a phases from the cultures. These may be useful in studying the genetics of transduction.

The materials which you wanted will be sent as soon as we can transfer the cultures and prepare the serums for shipment.

With kind regards, I am

For the Officer-in-Charge, Bacteriology Section

Sincerely yours,

*P.R. Edwards*

PRE:mg

Philip R. Edwards, Ph. D.  
Bacteriologist-in-Charge  
Enteric Bacteriology Unit

Encl.

P.S. From your last letter I am not sure whether I can figure out SW 1031 and I do not have yours of 4/30 at hand. Please return those pedigree sheets. I have no copies.

P.S. 2 I have now looked at your letter of 4/30 and can decipher SW 1031.

Personally I believe it is more important to describe the method of inoculation of a plate with brood phage than to describe the method of blowing out a tube. The latter is standard practice among enteric people, the former is new.

The gallinorum cultures do not exactly resemble (split out) any of the varieties of enteritidis. For description of properties of enteritidis varieties see:

Kauffmann Z. Hyg. u. Infekt. 1935, 117, 431  
K & Burton " 1935 117, 650

Did I tell you the brochure of all S. abortus equi derivations were OK? Was S. ty. mix 2 job 2 (last shipment) the culture used in the abortus equi. expts?